

CLAIMS

1. Method to improve plant growth characteristics relative to corresponding wild-type plants, comprising introduction into a plant of a nucleic acid encoding a CCS52 protein under the control of a medium-strength promoter.

2. Method according to claim 1, wherein said growth characteristic comprises increased yield/biomass.

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3. Method according to claim 2, wherein said increased yield/biomass comprises increased plant size, increased organ size or increased number of organs.

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4. Method according to claim 3, wherein said increased organ size is selected from increased leaf size, increased seed size or increased stem diameter.

5. Method according to claim 3, wherein said increased number of organs is selected from increased number of leaves, increased number of branches, increased number of flowers or increased number of seeds.

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6. Method according to any of claims 1 to 5, wherein said CCS52 protein is a CCS52A protein.

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7. Method according to any of claims 1 to 6, wherein said nucleic acid encoding a CCS52 protein is as represented by SEQ ID NO 1, 3 or 5, or a variant of any of SEQ ID NO 1, 3 or 5 and/or wherein said CCS52 protein is a protein as represented by SEQ ID NO 2, 4 or 6, or a variant of any of SEQ ID NO 2, 4 or 6.

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8. Method according to any of claims 1 to 7, wherein said medium-strength promoter is a medium-strength constitutive promoter.

5 9. Method according to claim 8, wherein said promoter is a ubiquitin promoter or a promoter with a similar expression pattern.

10. Genetic construct comprising:
(a) a CCS52 nucleic acid or a variant thereof, encoding a CCS52 protein or a variant thereof; operably linked to
10 (b) a medium-strength promoter; and optionally
(c) a transcription termination sequence.

11. Genetic construct according to claim 10, wherein said promoter is a medium-strength constitutive promoter.

15 12. Genetic construct according to claim 10 or 11, wherein said promoter is a ubiquitin promoter or a promoter with a similar expression pattern.

20 13. Method for the production of a transgenic plant having improved growth characteristics relative to corresponding wild-type plants, comprising:

a) introducing into a plant cell a genetic construct according to any of claims 10 to 12;

b) cultivating said plant cell under conditions promoting plant growth.

25 14. Host cell containing a genetic construct as defined in any of claims 10 to 12.

30 15. Plant obtainable by a method according to any of claims 1 to 9 or 13, which plant has improved growth characteristics relative to corresponding wild-type plants.

16. Transgenic plant containing a genetic construct as defined in any of claims 10 to 12, which plant has improved growth characteristics relative to corresponding wild-type plants.

5 17. Transgenic plant according to claim 16, wherein said plant is a monocotyledonous plant, preferably a cereal such as rice or maize.

10 18. Transgenic plant according to claim 16, wherein said plant is a dicotyledoneous plant, preferably a dicotyledoneous crop plant or ornamental, such as azalea.

19. Plant part, preferably a harvestable part, such as a seed, or a propagule of a plant as defined in any of claims 15 to 18.

15 20. Progeny of a plant as defined in any of claims 15 to 18.

21. Use of a nucleic acid encoding a CCS52 protein under control of a medium-strength promoter for improving plant growth characteristics.